Volume 58 1975

Table of Contents

No. 1 pp. 1–252 issued on October 1, 1975
No. 2 pp. 253–632 issued on October 15, 1975

1 Collected Tentative Rules and Recommendations of the IUPAC-IUB Commission on Biochemical Nomenclature (CBN). Second edition. IUB Committee of Editors of Biochemical Journals (CEBJ)

3 Character of the Stimulatory Response of Uridine Kinase in Rat Livers to Cycloheximide Treatment
A. Čihák

9 Lysosomal Enzymes as Agents of Turnover of Soluble Cytoplasmic Proteins
R. T. Dean

15 Studies on Plasma Free-Fatty-Acid Metabolism and Triglyceride Synthesis of Brown Adipose Tissue *in vivo* during Cold-Induced Thermogenesis of the Newborn Rabbit
H. Schenk, T. Heim, T. Mende, F. Varga, and E. Goetze

23 A Fluorescence Study of the Temperature-Dependent Polymerization of Bovine β-Casein A[1]
K. N. Pearce

31 Adenine Nucleosides in Solution: Circular Dichroism Studies and Base Conformation
H. Follmann, I. Kuntz, and W. Zacharias

43 Biochemical Research on Oogenesis. Comparison between Transfer RNAs from Somatic Cells and from Oocytes in *Xenopus laevis*
H. Denis, A. Mazabraud, and M. Wegnez

51 Characterization of Yeast Ribosomal DNA
J. Retèl and H. van Keulen

59 Initiation Specificity of the Poly(cytidylic acid)-Dependent Qβ Replicase Activity
G. Feix and H. Sano

65 The Location and Function of Cytochrome c_2 in *Rhodopseudomonas capsulata* Membranes
A. Hochman, I. Fridberg, and C. Carmeli

73 Synthesis of S-100 Protein in Monolayer Cultures of Rat Glial Cells
G. Labourdette and A. Marks

81 Structure and Synthesis of a Lipid-Containing Bacteriophage. A Polynucleotide-Dependent Polynucleotide-Pyrophosphorylase Activity in Bacteriophage PM2
R. Schäfer and R. M. Franklin

87 Poly(A) Synthesis in T2L Phage-Infected *Escherichia coli*. A Combination of Polynucleotide Phosphorylase and ATPase
W. Wunderli, R. Hütter, M. Staehelin, and W. Wehrli

95 Carboxymethylation of Horse-Liver Alcohol Dehydrogenase in the Crystalline State. The Active-Site Zinc Region and General Anion-Binding Site of the Enzyme Correlated in Primary and Tertiary Structures
E. Zeppezauer, H. Jörnvall, and I. Ohlsson

105 Adenosine-3′:5′-Monophosphate-Dependent and Plasma-Membrane-Associated Protein Kinase from Bovine Corpus Luteum. Solubilization and Properties of Solubilized Enzyme
S. Azhar and K. M. J. Menon

117 Amino-Acid Sequence of Toxin III of *Naja haje*
C. Kopeyan, F. Miranda, and H. Rochat

123 Modulation of the Enzymic Activity of Chicken Pepsin by the Covalent Modification of Its Single—SH Group
Y. Shechter, M. Rubinstein, R. Becker, and Z. Bohak

133 Ion-Binding to Phospholipids. Interaction of Calcium and Lanthanide Ions with Phosphatidylcholine (Lecithin)
H. Hauser, M. C. Phillips, B. A. Levine, and J. P. Williams

145 Identity and Activities of Lysosomal Enzymes in Parenchymal and Non-Parenchymal Cells from Rat Liver
T. J. C. van Berkel, J. K. Kruijt, and J. F. Koster

153 Highly Purified Glutamine Transaminase from Rat Brain. Physical and Kinetic Properties
F. van Leuven

159 The Initial Binding of Cu(II) to Some Amino Acids and Dipeptides: A ^{13}C Nuclear-Magnetic-Resonance Study
W. Voelter, G. Sokolowski, U. Weber, and U. Weser

167 Kinetic Investigation of the α-Chymotrypsin-Catalyzed Hydrolysis of Peptide-Ester Substrates. The Relationship between the Structure of the Peptide Moiety and Reactivity
S. A. Bizzozero, W. K. Baumann, and H. Dutler

177 Control of Fatty-Acid-Synthetase Biosynthesis in *Saccharomyces cerevisiae*
G. Dietlein and E. Schweizer

185 Polyadenylation of RNA *in vitro* in Isolated Chromatin and Nuclei
D. I. de Pomerai and P. H. W. Butterworth

193 Influence of Various Factors on the Recognition Specificity of tRNAs by Yeast Valyl-tRNA Synthetase
J. Bonnet and J.-P. Ebel

203 Molecular Changes Associated with Proteolysis of Bovine Factor V by Thrombin
C. L. Kandall, R. Rosenberg, and R. W. Colman

213 Immunochemical Studies of Factor V
A. C. Greenquist, R. M. Weinberg, A. L. Kuo, and R. W. Colman

223 The Mannosylation of Dolichol-Diphosphate Oligosaccharides in Relation to the Formation of Oligosaccharides and Glycoproteins in Pig-Liver Endoplasmic Reticulum
G. J. A. Oliver, J. Harrison, and F. W. Hemming

231 Heart Hexokinase: Quaternary Structure Changes Accompanying the Binding of Regulatory Molecules
J. S. Easterby

237 Animal DNA-Dependent RNA Polymerases. Partial Purification and Properties of Three Classes of RNA Polymerases from Uninfected and Adenovirus-Infected HeLa Cells
P. Hossenlopp, D. Wells, and P. Chambon

253 Fractionation of Rat-Liver-Chromatin Nonhistone Proteins into Two Groups with Different Metabolic Rates
G. Russev, B. Anachkova, and R. Tsanev

259 Solution Conformation of Virginiamycins (Staphylomycins)
M. J. O. Anteunis, R. E. A. Callens, and D. K. Tavernier

269 On the Dissociation and Association of *Escherichia coli* Ribosomes
H. Walters, W. Smits, J. van Kessel, and G. van Os

273 Heterogeneity of the Lipopolysaccharide from *Pseudomonas aeruginosa*
I. R. Chester and P. M. Meadow

283 Transcription of the Genome of Adenovirus Type 12. Viral mRNA in Productively Infected KB Cells
K.-H. Scheidtmann, J. Ortin, and W. Doerfler

291 Structure and Synthesis of a Lipid-Containing Bacteriophage. Chemical Modifications of Bacteriophage PM2 and the Resulting Alterations in Acyl-Chain Motion in the PM2 Membrane
R. Schäfer, U. Huber, R. M. Franklin, and J. Seelig

297 Polynucleotide Kinase from Rat-Liver Nuclei. Purification and Properties
H. Teraoka, K. Mizuta, F. Sato, M. Shimoyachi, and K. Tsukada

303 Replication of Colicinogenic Factor E1 DNA in Plasmolysed *Escherichia coli* Cells. Coupling of DNA Replication and RNA Synthesis
W. L. Staudenbauer

315 Non-histone Chromosomal Proteins. Their Isolation and Role in Determining Specificity of Transcription *in vitro*
H. Blüthmann, S. Mrozek, and A. Gierer

327 Ultrastructural Organization and Biochemical Characterization of Chromatin · RNA · Protein Complexes Isolated from Mammalian Cell Nuclei
J.-P. Bachellerie, E. Puvion, and J.-P. Zalta

339 Interaction between the Synthesis of α and β Globin
L. M. Garrick, P. P. Dembure, and M. D. Garrick

351 Phenol Hydroxylase from Yeast. Sulfhydryl Groups in Phenol Hydroxylase from *Trichosporon cutaneum*
H. Y. Neujahr and A. Gaal

359 Phage Qβ Replicase: Cell-Free Synthesis of the Phage-Specific Subunit and Its Assembly with Host Subunits to Form Active Enzyme
M. Happe and H. Jockusch

367 The Influence of Insulin on Glucose Permeability and Metabolism of Human Granulocytes
J.-P. Leroux, J.-C. Marchand, R. Hong Tuan Ha, and P. Cartier

375 Studies on Norepinephrine-Induced Efflux of Free Fatty Acid from Hamster Brown-Adipose-Tissue Cells
L. L. Bieber, B. Pettersson, and O. Lindberg

383 The Use of Primed Synthesis by DNA Polymerase I to Study an Intercistronic Sequence of ΦX-174 DNA
J. E. Donelson, B. G. Barrell, H. L. Weith, H. Kössel, and H. Schott

397 The Photochemical Inactivation of Peptidyl Transferase Activity
K. K. Wan, N. D. Zahid, and R. M. Baxter

403 Properties of the High-Molecular-Weight Protein (Spectrin) from Human-Erythrocyte Membranes
W. B. Gratzer and G. H. Beaven

411 Requirement for Ribosome-Releasing Factor for the Release of Ribosomes at the Termination Codon
K. Ogawa and A. Kaji

421 Control of Haemoglobin Synthesis. The Effects of Iron Deprivation, Cobalt and Temperature on the Rate and Extent of Globin Synthesis in Reticulocytes
A. R. Hunter and R. J. Jackson

431 Precursor mRNA from Erythroid-Enriched Bone-Marrow Cells of the Rabbit. Electron Microscope Investigation of Precursor mRNA Molecules, Molecular Weight about 1.7×10^7, Containing mRNA-Like Structures at One End
A.-M. Ladhoff, B. J. Thiele, and C. Coutelle

439 The Amino-Acid Sequence of Isoinhibitor K from Snails *(Helix pomatia)* A Sequence Determination by Automated Edman Degradation and Mass-Spectral Identification of the Phenylthiohydantoins
H. Tschesche and T. Dietl

453 Trypsin-Kallikrein Isoinhibitor K (Type Kunitz) from Snails *(Holix pomatia)*. Purification and Characterization
T. Dietl and H. Tschesche

461 Co-fractionation of an Endonuclease Activity during the Purification of DNA Polymerase-α from Regenerating Rat Liver. Properties and Separation from DNA Polymerase
M. Mechali and A.-M. de Recondo

467 Patulin Biosynthesis: The Metabolism of *m*-Hydroxybenzyl Alcohol and *m*-Hydroxybenzaldehyde by Particulate Preparations from *Penicillium patulum*
G. Murphy and F. Lynen

477 Regulation of Rat-Liver Glycoprotein: *N*-Acetylneuraminic Acid Transferase Activity by Pyrimidine Nucleotides
R. J. Bernacki

483 Formation, Size, and Solubility in Chloroform/Methanol of Products of Protein Synthesis in Isolated Mitochondria of Rat Liver and Zajdela Hepatoma
Š. Kužela, V. Krempaský, J. Kolarov, and V. Ujházy

493 Enzymic Properties of Nitrated α-Chymotrypsin and δ-Chymotrypsin
K. B. Svensson, J.-M. Imhoff, and B. Keil

501 The Importance of *Escherichia coli* Ribosomal Proteins L1, L11 and L 16 for the Association of Ribosomal Subunits and the Formation of the 70-S Initiation Complex
M. Kazemie

511 Identification by Gas Chromatography and Mass Spectrometry of 1-Monoglycerides in European Hamster Brown Adipose Tissue and Plasma
G. Linck, G. Teller, and A. Petrovic

517 Glucosylation of Galactosylhydroxylysyl Residues in Collagen *in vitro* by Collagen Glucosyltransferase. Inhibition by Triple-Helical Conformation of the Substrate
R. Myllylä, L. Risteli, and K. I. Kivirikko

523 Mitochondria and Peroxisomes from the Cellular Slime Mould *Dictyostelium discoideum*. Isolation Techniques and Urate Oxidase Association with Peroxisomes
R. W. Parish

533 Interaction between Arginase and L-Ornithine Carbamoyltransferase in *Saccharomyces cerevisiae*. The Regulatory Sites of Arginase
M. Penninckx

539 Amino-Acid Sequence of the Cyanogen-Bromide Fragment from Human Plasminogen that Forms the Linkage between the Plasmin Chains
B. Wiman and P. Wallén

549 Sites of Action of Fusidic Acid in Eukaryotes. Inhibition by Fusidic Acid of a Ribosome-Independent GTPase from *Artemia salina* Embryos
R. Mazumder

555 Interactions of Colipase with Bile Salt Micelles. 1. Ultracentrifugation Studies
M. Charles, M. Astier, P. Sauve, and P. Desnuelle

561 Interactions of Colipase with Bile Salt Micelles. 2. Study by Dialysis and Spectrophotometry
H. Sari, B. Entressangles, and P. Desnuelle

567 The Effect of pH on the Kinetics of Beef-Liver Fructose Bisphosphatase
H. G. Nimmo and K. F. Tipton

575 The Allosteric Properties of Beef-Liver Fructose Bisphosphatase
H. G. Nimmo and K. F. Tipton

587 Studies Concerning the Mechanism by which Translational-Control RNA Regulates Protein Synthesis in Embryonic Muscle
S. M. Heywood, D. S. Kennedy, and A. J. Bester

595 Tightness and Orientation of Vesicles from Guinea-Pig Kidney Estimated from Reactions of Adenosine Triphosphatase Dependent on Sodium and Potassium Ions
H. Walter

603 Two-Dimensional Gel Electrophoresis of Ribosomal Proteins from Streptomycin-Sensitive and Streptomycin-Resistant Mutants of *Chlamydomonas reinhardi*
M. Brügger and A. Boschetti

611 Envelope-Bound *N*-Acetylmuramyl-L-alanine Amidase of *Escherichia coli* K12. Purification and Properties of the Enzyme
J. van Heijenoort, C. Parquet, B. Flouret, and Y. van Heijenoort

621 The Isolation of Two Different Lipopolysaccharide Fractions from Various *Proteus mirabilis* Strains
J. Gmeiner

627 Identification of Ribitol Phosphate as a Constituent of the Lipopolysaccharide from *Proteus mirabilis*, Strain D52
J. Gmeiner

631 Corrections

Indexed in Current Contents